

**MODULATION BY PHASE AND TIME SHIFT KEYING  
AND METHOD OF USING THE SAME**

**ABSTRACT OF THE DISCLOSURE**

The present invention provides for a propagated signal modulated by phase and time shift keying and a method of using the same. In one embodiment the propagated signal includes: (1) a period of time spanned by a pulse, the period of time divided into a group of time slots, each of the time slots having a unique phase/time position; and (2) the pulse encoding a data element by the phase/time position.